Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation

COMMON NAME	Little Bluestem - Grama (Side-oats, Blue) - Threadleaf Sedge Herbaceous Vegetation
SYNONYM	Northern Great Plains Little Bluestem Prairie
PHYSIOGNOMIC CLASS	Herbaceous vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural / semi-natural (V.A.5.N)
FORMATION	Medium-tall sod temperate or subpolar grassland (V.A.5.N.c.)
ALLIANCE	*Schizachyrium scoparium - Bouteloua curtipendula* Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE
Globally
This community is found in western North Dakota, western South Dakota, eastern and northern Wyoming, central and eastern Montana, southern Saskatchewan, and southern Manitoba.

Devils Tower National Monument
This community is widespread, occurring in areas underlain by sedimentary rocks. It is well-developed on the open lower slopes north of the park road from Prairie Dog Town to Tarpot Draw, and on open slopes along the northeast part of the Red Beds Trail. In the northeast part of the park, this type occurs in a mosaic with *Poa pratensis* Herbaceous Vegetation.

ENVIRONMENTAL DESCRIPTION
Globally
This community is usually found on gentle to steep slopes with variable aspects (Thilenius 1972, Hansen et al. 1984, Johnston 1987, Hansen and Hoffman 1988). The soil may be loamy sand, sandy loam, loam, or clay loam. There may be a substantial component of gravel. Hansen et al. (1984) found 7-36% gravel by weight in 16 stands in western North Dakota. The soils are typically shallow and occur over sandstone or limestone (Johnston 1987, Thilenius et al. 1995).

Devils Tower National Monument
This community occurs on moderate slopes (less than 15 degrees) underlain by sedimentary rocks. It was observed on all aspects but northerly. In the northeast part of the park, this type occurs in a mosaic with *Poa pratensis* Herbaceous Vegetation. In this area, *Schizachyrium scoparium* covers low ridges with *Poa pratensis* in the intervening swales.

MOST ABUNDANT SPECIES
Globally

Strata	Species
Herbaceous	*Bouteloua curtipendula, Bouteloua gracilis, Carex filifolia, Schizachyrium scoparium*

Devils Tower National Monument

Strata	Species
Herbaceous	*Schizachyrium scoparium*

DIAGNOSTIC SPECIES
Globally
Schizachyrium scoparium, Carex filifolia, Bouteloua gracilis, Andropogon gerardii

Devils Tower National Monument
Schizachyrium scoparium

VEGETATION DESCRIPTION
Globally
This community is predominantly composed of graminoid species less than 1 m tall. Occasional *Pinus ponderosa* are scattered throughout the type. The vegetation cover is moderate to high. Thilenius et al. (1995) found that vegetation cover was 44% in Wyoming and Hansen and Hoffman (1988) found 75% cover in North Dakota. The dominant species is *Schizachyrium scoparium* with *Bouteloua curtipendula, B. gracilis*, and *Carex filifolia* as associates or co-dominants. *Andropogon gerardii, Carex inops* ssp. *heliophila, C. eleocharis, Koeleria macrantha* and *Calamovilfa longifolia* are often present. *C. longifolia* may be abundant on sandier soils. *Muhlenbergia cuspidata, Stipa comata, Pascopyrum smithii,* and *Nassella viridula* may also be present. *Pseudoroegneria spicata* may be found in the western portions of this community (Jones 1992). In Manitoba, the graminoids *Festuca ovina* and *Elymus trachycaulus* and the lichen *Selaginella densa* are more abundant (Greenall 1995). Forbs do not contribute greatly to the canopy, but many species may be found in this community (Hanson and Whitman 1938). Among the forbs that may be found are *Echinacea angustifolia, Aster oblongifolius, A. ericoides, Gaura coccinea, Lygodesmia juncea, Helianthus pauciflorus* ssp. *pauciflorus, Rosa arkansana, Liatris punctata, Psoralea argophylla, Dalea purpurea, Phlox hoodii*, and *Campanula rotundifolia.* There are very few woody species; those that are present are usually short shrubs such as *Artemisa frigida, Juniperus horizontalis,* and *Yucca glauca*. Litter often accumulates and may cover more than 50% of the ground (Hirsch 1985).

Devils Tower National Monument
The herbaceous stratum typically ranges from 25 to 75% cover and is dominated by *Schizachyrium scoparium. Bouteloua curtipendula, Stipa comata*, and *Andropogon gerardii* are sometimes common. At Devils Tower NM, *Carex filifolia* was not observed in this community.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G3

RANK JUSTIFICATION

DATABASE CODE CEGL001681

COMMENTS
Globally
Fire likely played a major role in this type. Periodic fire likely helped graminoid production and deterred tree growth.

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